## IV Iron Table

<table>
<thead>
<tr>
<th>Trade Name</th>
<th>Dose</th>
<th>FDA Approved Indication</th>
<th>Black Box Warning</th>
<th>Maximum FDA Approved Single Dose Dosing</th>
<th>Adult Dosage and Administration</th>
<th>Route of Administration</th>
<th>Trade Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFeD</td>
<td>100 mg</td>
<td>Iron deficiency in patients whom oral administration is unsatisfactory or impossible.</td>
<td>Yes. Anaphylactic-type reactions, including fatalities, have followed the parenteral administration of iron dextran injection.</td>
<td>Doses less than or equal to 300 mg, slow IV push at a rate not to exceed 50 mg/minute; or diluted in 100-250 mL normal saline. For administration of a 1000 mg total dose infusion, the total calculated dose should be diluted in 500 mL (range of 250 to 1000 mL) of normal saline. After a test infusion, the solution may be infused over 1 or more hours.</td>
<td>Adult Patients: Administer Venoferric 100 mg undiluted as a slow intravenous injection over 2 to 5 minutes. For administration of a 1000 mg total dose infusion, the total calculated dose should be diluted in 500 mL (range of 250 to 1000 mL) of normal saline. After a test infusion, the solution may be infused over 1 or more hours.</td>
<td>IV infusion or IM injection (not recommended)</td>
<td>INFeD (Sanofi Aventis)</td>
</tr>
<tr>
<td>(Sanofi Aventis)</td>
<td></td>
<td>Venofer is an iron replacement product indicated for the treatment of iron deficiency anemia in adult patients with chronic kidney disease (CKD).</td>
<td>No</td>
<td>400 mg</td>
<td>Adult Patients with CKD on dialysis: Administer Venoferric 100 mg undiluted as a slow intravenous injection over 2 to 5 minutes. For administration of a 1000 mg total dose infusion, the total calculated dose should be diluted in 500 mL (range of 250 to 1000 mL) of normal saline. After a test infusion, the solution may be infused over 1 or more hours.</td>
<td>IV injection or IM injection (not recommended)</td>
<td>Venofer (American Regent Inc)</td>
</tr>
<tr>
<td>Ferric Gluconate</td>
<td>125 mg</td>
<td>Iron deficiency anemia in adult patients and in pediatric patients age 6 years and older with chronic kidney disease. Ferric Gluconate may be diluted in 100 mL of 0.9% sodium chloride administered by intravenous infusion over 1 hour per dialysis session. Ferric Gluconate may also be administered undiluted as a slow intravenous injection (at a rate of up to 12.5 mg/min) per dialysis session. For repletion treatment most patients may require a cumulative dose of 1000 mg of elemental iron administered over 8 dialysis sessions. Ferric Gluconate has been administered at sequential dialysis.</td>
<td>No</td>
<td>510 mg</td>
<td>The recommended dose of Feraheme is an initial 510 mg intravenous injection followed by a second 510 mg intravenous injection 3 to 8 days later. Administer Feraheme as an undiluted intravenous injection delivered at a rate of up to 1 mL/sec (30 mg/sec). The recommended Feraheme dose may be readministered to patients with persistent or recurrent iron deficiency anemia.</td>
<td>IV infusion or IM injection (not recommended)</td>
<td>Ferric Gluconate (Sanofi Aventis US)</td>
</tr>
<tr>
<td>Ferumoxytol</td>
<td>750 mg</td>
<td>Iron deficiency anemia in adult patients with chronic kidney disease (CKD).</td>
<td>No</td>
<td>1000 mg</td>
<td>Up to 750 mg can be delivered in a single dose. Give 2 doses separated by at least 7 days for a total cumulative dose of up to 1500 mg per course.1 Administer Monoferric as 20 mg/kg actual body weight as an intravenous infusion. Repeat Monoferric treatment if iron deficiency anemia reoccurs. Withdraw the appropriate volume of Monoferric and dilute in 100 mL to 500 mL of 0.9% Sodium Chloride Injection, USP. Final diluted concentration should be more than 1 mg iron/mL. Administer the prepared solution via intravenous infusion over at least 20 minutes.</td>
<td>IV infusion or IM injection (not recommended)</td>
<td>injectafer (American Regent Inc)</td>
</tr>
<tr>
<td>Ferric Carboxymaltose</td>
<td></td>
<td>Iron deficiency anemia in adult patients who have intolerance to oral iron or have had unsatisfactory response to oral iron; or who have non-dialysis dependent chronic kidney disease.</td>
<td>No</td>
<td>750 mg</td>
<td>For patients weighing 50 kg or more: Administer 1,000 mg of Monoferric as an intravenous infusion. For patients weighing less than 50 kg: Administer Monoferric as 20 mg/kg actual body weight as an intravenous infusion. Repeat Monoferric treatment if iron deficiency anemia reoccurs. Withdraw the appropriate volume of Monoferric and dilute in 100 mL to 500 mL of 0.9% Sodium Chloride Injection, USP. Final diluted concentration should be more than 1 mg iron/mL. Administer the prepared solution via intravenous infusion over at least 20 minutes.</td>
<td>IV infusion or IM injection (not recommended)</td>
<td>Ferric Carboxymaltose (American Regent Inc)</td>
</tr>
<tr>
<td>Ferric Derisomaltose</td>
<td>1000 mg</td>
<td>Iron deficiency anemia in adult patients who have intolerance to oral iron or have had unsatisfactory response to oral iron; or who have non-hemodialysis dependent chronic kidney disease.</td>
<td>No</td>
<td>1000 mg</td>
<td>For patients weighing 50 kg or more: Administer 1,000 mg of Monoferric as an intravenous infusion. For patients weighing less than 50 kg: Administer Monoferric as 20 mg/kg actual body weight as an intravenous infusion. Repeat Monoferric treatment if iron deficiency anemia reoccurs. Withdraw the appropriate volume of Monoferric and dilute in 100 mL to 500 mL of 0.9% Sodium Chloride Injection, USP. Final diluted concentration should be more than 1 mg iron/mL. Administer the prepared solution via intravenous infusion over at least 20 minutes.</td>
<td>IV infusion or IM injection (not recommended)</td>
<td>Ferric Derisomaltose (Pharmacosmos Therapeutics Inc)</td>
</tr>
</tbody>
</table>

1. For patients weighing less than 50 kg: Administer Monoferric as 20 mg/kg actual body weight as an intravenous infusion. Repeat Monoferric treatment if iron deficiency anemia reoccurs. Withdraw the appropriate volume of Monoferric and dilute in 100 mL to 500 mL of 0.9% Sodium Chloride Injection, USP. Final diluted concentration should be more than 1 mg iron/mL. Administer the prepared solution via intravenous infusion over at least 20 minutes.
## Iron Dextran

- Maximum of 250 mL of 0.9% NaCl, over a period of 3.5 to 4 hours on day 1 and day 14.
- 2.3 Adult Patients with CKD receiving peritoneal dialysis: Administer Venofer in 3 divided doses, given by slow intravenous infusion, within a 28-day period. 2 infusions each of 300 mg over 1.5 hours 14 days apart followed by one 400 mg infusion over 2.5 hours 14 days later. Dilute Venofer in a maximum of 250 mL of 0.9% NaCl.

### Pediatric Indication

- Yes. > 4 months of age
- No

### Pediatric Dosing

- Greater than 10 Kg: Administer 100 mg iron dextran IV per day until total calculated dose is given.
- 5-10 Kg: Administer 50 mg iron dextran IV per day until the total calculated dose is given.
- Infants greater than 4 months but less than 5 Kg: Administer 25 mg iron dextran IV per day until the total calculated dose is given.

### Lactating Women

- Traces of unmetabolized iron dextran are excreted in human milk.

## Iron Sucrose

- It is not known whether iron sucrose is excreted in human milk.

## Ferric Gluconate

- It is not known whether Ferlecit is excreted in human milk. Benzyl alcohol present in maternal serum is likely to cross into human milk and may be orally absorbed by a nursing infant. Caution should be exercised when Ferlecit is administered to a nursing woman [see Use in Specific Populations].

## Ferumoxytol

- It is not known whether ferumoxytol is present in human milk.

## Ferric Carboxymaltose

- The available published data on the use of ferric carboxymaltose in lactating women demonstrate that iron is present in breast milk. However, the data do not inform the full potential exposure of iron for the breastfed infant. Among the breastfed infants, there were no adverse events reported that were considered related to ferric carboxymaltose exposure through breastmilk.

## Ferric Derisomaltose

- The available data on the use of Monoferric in lactating women do not inform the potential exposure of iron for the breastfed child or the effects on milk production.

<table>
<thead>
<tr>
<th>Pediatric Indication</th>
<th>No</th>
<th>No</th>
<th>No</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatric Dosing</td>
<td>Yes. &gt; 4 months of age</td>
<td>Yes. &gt;6 years of age</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Lactating Women</td>
<td>It is not known whether iron dextran is excreted in human milk.</td>
<td>It is not known whether Ferlecit is excreted in human milk.</td>
<td>It is not known whether ferumoxytol is present in human milk.</td>
<td>The available published data on the use of ferric carboxymaltose in lactating women demonstrate that iron is present in breast milk. However, the data do not inform the full potential exposure of iron for the breastfed infant. Among the breastfed infants, there were no adverse events reported that were considered related to ferric carboxymaltose exposure through breastmilk.</td>
</tr>
</tbody>
</table>

Pediatric Indication: Yes = indicated, No = not indicated.

Pediatric Dosing: Pediatric Use Safety and effectiveness of Venofer in pediatric patients have not been established.
References
InFeD [package insert]. Madison, NJ: Allergan USA, Inc.; 2020

Note: The US FDA has amended the pregnancy labeling rule for prescription drug products to require labeling that includes a summary of risk, a discussion of the data supporting that summary, and relevant information to help health care providers make prescribing decisions and counsel women about the use of drugs during pregnancy. Pregnancy categories A, B, C, D, and X are being phased out.

Disclaimer
This content is covered by an important disclaimer that can be found at sabm.org/iron-corner. Please read this disclaimer carefully before reviewing this content.